

Claims

1. A drill head for preparing the bone of two opposing vertebral bodies to accept a predetermined shape of an endoprosthesis comprising:

the opposing

1.

a form cutter having a profile capable of imparting a shape to the bone of vertebral bodies which mates with the predetermined endoprosthesis surface shape;

drive means for providing a driving force to the form cutter, and

means for housing the form cutter and the drive means,

wherein the profile of the form cutter is of a height capable of being admitted into the space between two opposing vertebral bodies.

- 2. The drill head of Claim 1 wherein the form cutter has a convex shape.
- 3. The drill head of Claim 2 wherein the form cutter is provided with a beveled gearing surface.
- 4. The drill head of Claim 2 wherein the form cutter is provided with a groove about its perimeter.
- 5. The drill head of Claim 1 wherein the drive means comprises a drive shaft operatively coupling the form cutter to a drive source.
- 6. The drill head of Claim 5 wherein a distal end of the drive shaft is provided with a pinion gear which cooperates with the form cutter to impart a rotary motion to the form cutter.
- 7. The drill head of Claim 5 wherein a proximal end of the drive shaft is provided with a coupling means for coupling the drive shaft to the drive source.
- 8. The drill head of Claim 1 wherein the drive means comprises a belt operatively coupling the form cutter to a drive source.

9. The drill head of Claim 8 wherein the belt loops about the perimeter of the form cutter.

10. The drill head of Claim ⁹1 wherein the drive means further comprises a drive shaft operatively coupled to the belt.

11. The drill head of Claim 10 wherein the drive shaft is provided with a pulley about which the belt is looped.

12. The drill head of Claim 11 wherein the drive shaft is further provided with a coupling means for coupling the drive shaft to the drive source.

13. The drill head of Claim 1 wherein the housing is provided with attachment means for attaching the drill head to a drive source.

14. The drill head of Claim 1 wherein the maximum height of the profile of the form cutter is approximately nine millimeters.

15. A drill head for preparing the bone of two opposing vertebral bodies to accept the concaval-convex shape of an endoprosthesis comprising:

a form cutter having a support shaft capable of imparting a concave shape to the bone of vertebral bodies;

drive means for providing a driving force to the form cutter, the drive means including a drive shaft; and

means for housing the form cutter and the drive means,

wherein the angle between the support shaft of the form cutter and the drive shaft is approximately 96°.

16. The drill head of Claim 15 wherein the form cutter has a predetermined profile.
17. The drill head of Claim 16 wherein the maximum height of the profile of the form cutter is approximately nine millimeters.